

TABLE II-14

Ultrasonic Measurements of Tank Wall Thickness

Tank	Date in Service	Tank Part ^a	Nominal Thick- ness, in.	1967 (Analog)			1972 - 1973 (Digital) ^b		
				No. of Measure- ments	Range, in.	Avg., in.	No. of Measure- ments	Range, In.	Avg., in.
2	1955	Bot. K.	1/2	39	0.47-0.53	0.50	1	0.505	0.505
		1 C	1/2	27	0.49-0.55	0.52	6	0.497-0.519	0.513
		2 C	1/2	24	0.49-0.56	0.52	9	0.503-0.539	0.525
		Top K.	1/2	22	0.48-0.52	0.50	2	0.505-0.506	0.506
5	1959	Bot. K.	1/2	52	0.44-0.52	0.48			
		1 C	1/2	77	0.47-0.53	0.50			
		2 C	1/2	41	0.48-0.55	0.52			
		Top K.	1/2	24	0.46-0.52	0.49			
<u>1969 (Analog)</u>									
11	1955	Bot. K.	1/2	10	0.44-0.58	0.46	7	0.499-0.508	0.504
		1 C	1/2	25	0.45-0.52	0.49	31	0.484-0.536	0.504
		2 C	1/2	19	0.48-0.53	0.51	17	0.509-0.524	0.518
		Top K.	1/2	1	0.47	0.47	4	0.505-0.506	0.506
12	1956	Bot. K.	1/2	7	0.46-0.50	0.48	22	0.507-0.516	0.509
		1 C	1/2	35	0.47-0.56	0.49	68	0.510-0.552	0.534
		2 C	1/2	16	0.48-0.56	0.51	42	0.517-0.554	0.540
		Top K.	1/2	4	0.48-0.54	0.50	9	0.507-0.534	0.513
15	1960	Bot. K.	7/8				8	0.879-0.885	0.882
		1 C	5/8				28	0.639-0.666	0.654
		2 C	5/8				17	0.649-0.682	0.671
		Top K.	9/16				0		
29	1971	Bot. K.	1				3	1.030-1.033	1.032
		1 C	3/4				11	0.777-0.787	0.782
		2 C	5/8				8	0.648-0.659	0.655
		3 C	1/2				9	0.518-0.526	0.524
		Top K.	1/2				0		
21	1961	Bot. Plate	3/8				5	0.390-0.393	0.392
23	1963	Bot. Plate	3/8				5	0.395-0.397	0.397

a. K = Knuckle, 1C = first course side plate, 2C = second course side plate, etc.

b. Additional surveys in 1973-1975 in 35 riser positions in Tanks 2, 4, 5, 6, 7, 8, 11, 12, 13, 21, 22, 23, 29, and 30 showed similar results, i.e., measurements compared favorably with rolling mill specifications.